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Abstract

Compositions and processes for qualitative or quantitative one-step, two-site, tag/anti-tag or competitive non-bibulous lateral flow (immunochromatographic) assays for analytes in body fluids including chemically modified proteins as blocking and/or dispersing agents in conjunction with additives eliminating non-specific interference with the detection agents and/or binding partner caused by endogenous polypeptide constituents. Composition of the chemically modified proteins can be albumins. Composition of the chemically modified albumins can have altered charge and/or molecular weight. Process for composition of the chemically modified proteins can be prepared by modification of the nucleophilic groups. The chemical modification of nucleophilic groups in albmins can be introduced by anhydrides, alkyl acetimidates, methylating and/or cross-linking agents. The additives eliminating non-specific interference can be chemically modified albumins, heterophilic blockers and chaotropic agents.